AGENDA TITLE:

Adopt resolution to award bids for purchase of polemount and padmount

transformers (\$96,812.30) (EUD)

**MEETING DATE:** 

December 17, 2003

PREPARED BY:

Electric Utility Director

**RECOMMENDED ACTION**: That the City Council adopt a resolution awarding the bids for the purchase of polemount and padmount transformers to the bidders whose proposal and equipment meet City of Lodi specifications, and whose transformers are expected to yield the lowest overall life-cycle costs,

Wesco Distribution, San Leandro (polemounts & 112.5kVA padmounts) \$33,8195.0 Western States Electric, Portland, OR (50, 75, and 750kVA padmounts) \$45,239.91 Howard Industries, Laurel, MS (37.5kVA padmounts) \$ 6.038.31 Ermco, c/o Hees Enterprises, Astoria, OR (500kVA padmounts) \$11,714.58

BACKGROUND INFORMATION: On May 21, 2003, the City Council authorized the Electric Utility Department and the Purchasing Division to advertise for bids as necessary to meet the Electric Utility Department's requirements for polemount and padmount transformers through the fiscal year ending June 30, 2005.

On December 2, 2003, bids were opened for three sizes of polemount and six sizes of padmount transformers, and life-cycle costs were evaluated. (Life-cycle costs are the combined total of purchase price plus cost of operation based on estimated power loss during the projected life of the transformer. Proposals are also evaluated on the basis of compliance with equipment and bid specifications. Failure to comply with both may lead to disqualification of the bid.) A summary of the bid evaluation is attached as Exhibit A.

The polemount transformers are expected to be used in the reconstruction of the overhead distribution system near Church Street between Chestnut and Park Streets, and in the area south of Tokay Street and west of Hutchins Street. The padmount transformers are expected to be used in the Millsbridge #2 and Legacy #1 and #2 subdivisions, Millswood School, Tienda and Mills Professional offices, and the Plummer Cadillac auto dealership. A portion of the orders will be placed into inventory for use in the event of equipment failures or emergencies.

FUNDING:

Electric Utility Department 2003-2005 Financial Plan and Budget, Line Extensions.

Business Unit #161651, Page E-41

Alan N Vallow, Electric Utility Director

Prepared by Joel Harris, Purchasing Officer

APPROVED:

## RESOLUTION NO. 2003-234

## A RESOLUTION OF THE LODI CITY COUNCIL AWARDING THE BIDS FOR THE PURCHASE OF POLEMOUNT AND PADMOUNT TRANSFORMERS

WHEREAS, in answer to notice duly published in accordance with law and the order of this City Council, sealed bids were received and publicly opened on December 2, 2003, at 11:00 a.m. for the purchase of polemount and padmount transformers for the Electric Utility Department, described in the specifications therefore approved by the City Council on May 21, 2003. The quantity and type are as follows:

	Padmount Transformers	Polemount Transformers							
6 Each	37.5 kVA, 240/120 Volt, Single Phase Pad	8 Each	37.5 kVA, 120/240 Volt, Single Phase CP Pole						
25 Each	50 kVA, 240/120 Volt, Single Phase Pad	10 Each	50 kVA, 120/240 Volt, Single Phase CP Pole						
8 Each	75 kVA, 240/120 Volt, Single Phase Pad	7 Each	37.5 kVA, 277 Volt, Single Phase Conv. Pole						
5 Each	112.5 kVA, 208Y/120 Volt, Three Phase Pad								
1 Each	750 kVA, 208Y/120 Volt, Three Phase Pad								
2 Each	500 kVA, 480Y/277 Volt, Three Phase Pad								

WHEREAS, said bids have been compared, checked, and tabulated and a report thereof filed with the City Manager as shown on Exhibit A attached; and

WHEREAS, the City Manager recommends the award of the bid for the various types and sizes of Polemount and Padmount Transformers for the Electric Utility Department, be made to the bidders whose proposal and equipment meet City of Lodi specifications and whose transformers are expected to yield the lowest overall life-cycle costs as shown as follows:

Wesco Distribution, San Leandro	Polemounts and 112.5 kVA Padmounts	\$33,819.50
Western States Electric, Portland, OR	50, 75, and 750 kVA Padmounts	\$45,239.91
Howard Industries, Laurel, MS	37.5 kVA Padmounts	\$ 6,038.31
Ermco, c/o Hees Enterprises, Astoria, OR	500 kVA Padmounts	\$11,714.58

NOW, THEREFORE, BE IT RESOLVED by the Lodi City Council that the award of the bids for the purchase of polemount and padmount transformers for the Electric Utility Department, be and the same is hereby awarded to the bidders listed above.

Dated: December 17, 2003

I hereby certify that Resolution No. 2003-234 was passed and adopted by the City Council of the City of Lodi in a regular meeting held December 17, 2003, by the following vote:

AYES: COUNCIL MEMBERS - Beckman, Hitchcock, Howard, Land, and Mayor Hansen

NOES: COUNCIL MEMBERS - None

ABSENT: COUNCIL MEMBERS - None

ABSTAIN: COUNCIL MEMBERS - None

SUSAN J. BLACKSTON

Blocht

City Clerk

## Transformer Bid Evaluation

Bid Opening: December 2, 2003

Padmount

1.0775

December 3, 2003

Tax (factor): No Load Loss \$/watt: Load Loss \$/watt: 3.75 1 25

Bid Item 1: 37.5 kVA, 240/120 Volt, Si	ngle Phase Pad	j				No	umber of units:	6			28	>1.50
Vendor	Unit	Extended	Price	No Load	Load	No Load	Load	Cost of	Life Cycle	Delivery	Height	Impedance
	Price \$	Price \$	w/tax \$	Loss (watts)	Loss (watts)	Loss value	Loss value	Losses \$	Cost \$	(weeks)	(inches)	%
Howard Industries, Inc.	934.00	5,604.00	6,038,31	88	320	1,980.00	2,400.00	4,380.00	10,418.31	6-8	24	1,600
Wesco Distribution	994.00	5,964.00	6,426.21	72	333	1,620.00	2,497.50	4,117.50	10,543.71	8-10	24	
Central Moloney, Inc.	1,036.00	6,216.00	6,697.74	78	350	1,755.00	2,625.00	4,380.00	11,077.74	10	26	1.570
G E Supply	1,074.00	6,444.00	6,943.41	72	355	1,620.00	2,662.50	4,282.50	11,225.91	8	30	
Ermco / Hess Enterprises, Inc.	1,124.00	6,744.00	7,266.68	76			2,385.00	4,095.00	11,361.66	8-11	28	
Kuhlman Electric	1,200.00	7,200.00	7,758.00	91			2,602.50	4,650.00	12,408.00	8-10	27	
Western States (Cooper)	1,007.00	6,042.00	6,510.26	53	749	1,192.50	5,617.50	6,810.00	13,320.26	9-11	24	3,640
Western States (Pauwels)	No Bid		•					•				24.5
····								-				
Bid Item 2: 50 kVA, 240/120 Volt, Sin	gle Phase Pad					No	umber of units:	25			28	>1.60
Vendor	Unit	Extended	Price	No Load	Load	No Load	Load	Cost of	Life Cycle	Delivery	Height	Impedance
- A SUGG	Price \$	Price \$	w/tax \$		Loss (watts)		Loss value	Losses \$	Cost \$	(weeks)	(inches)	%
					,					<b>.</b>	•	
Western States (Cooper)	935.00	23,375.00	25,186.56	81	549	7,593,75	17,156.25	24,750.00	49,936.56	9-11	24	1,800
Howard industries, Inc.	992.00	24,800.00	26,722.00	97	452	9,093.75	14,125.00	23,218.75	49,940.75	6-8	24	
Wesco Distribution	1,096.00	27,400.00	29,523.50	80	422		13,187.50	20,687.50	50,211.00	8-10	24	
G E Supply	996.00	24,900.00	26,829.75	95	468		14,625.00		50,361.00	8	26.6	
Central Moloney, Inc.	1,149.00	28,725.00	30,951.19	101			-	22,343.75	53,294.94	10	32	
Ermco / Hess Enterprises, Inc.	1,178.00	29,450.00	31,732.38	92				21,812.50	53,544.88	8-11	28	
Kuhlman Electric	1,158.00	28,950.00	31,193.63	102	459	9,562.50	14,343.75	23,906.25	55,099.88	8-10	27	1,800
Western States (Pauwels)	No bid											
Bid Item 3: 75 kVA, 240/128 Volt, SIn	ata Shara Dad					N.	umber of units:	8	·	<del></del>	28	>1.80
ownems: 75 x4A, 240/120 you, 510	gie riiase raq					(4)	uniosi di units.	v			20	- 143643
Vendor	Unit	Extended	Price	No Load	Load	No Load	Load	Cost of	Life Cycle	Delivery	Height	impedance
	Price \$	Price \$	w/tax \$	Loss (watts)	Loss (watts)	Loss value	Loss value	Losses \$	Cost \$	(weeks)	(inches)	%
Western States (Cooper)	1,242.00	9.936.00	10,706.04	120	687	3,600,00	6,870.00	10,470.00	21,176.04	9-11	24	2.000
Howard industries, Inc.	1,306.00	10,448,00	11,257.72				6,000.00		21,397.72	6-8	24	
Wesco Distribution	1,114.00	8,912.00	9,602.68	141				11,980.00	21,582.68	8-10	24	1.990
Central Moloney, Inc.	1,397.00	11,176.00	12,042.14				5,800.00		21,592.14	10	32	
Ermco / Hess Enterprises, Inc.	1,398.00	11,184.00	12,050.76				6,280.00		21,750,76	9-12	28	2.000
Kuhiman Electric	1,525.00	12,200,00	13,145.50		686	3,720,00	6,860.00	10,580.00	23,725,50	8-10	27	
G E Supply	1,237.00	9,896.00	10,662.94	133	632	3,990.00	6,320.00	10,310.00	20,972.94	8	26.8	1.370 **
Western States (Pauwels)	No bid						1,000	1.4				

<sup>\*\*\*</sup> Does not meet specifications

Exh\_A\_121703.xls

Unit Price \$ 3,010.00 3,091.00 3,393.00 3,561.00 3,542.00 3,994.00 4,606.00 No bid	Extended Price \$ 15,050.00 15,455.00 16,965.00 17,805.00 17,710.00 19,970.00 23,030.00	Price w/tax \$ 16,216.38 16,652.76 18,279.79 19,184.89 19,082.53 21,517.68	No Load Loss (watts) 289 244 220 270 240	Load Loss (watts) 837 1026 902	No Load Loss value 5,418.75 4,575.00 4,125.00	5,231.25 6,412.50	Cost of Losses \$ 10,650.00 10,987.50	Life Cycle Cost \$ 26,866.38 27,640.26	Delivery (weeks) 8-10 6-9	Height (inches) 42.5 49	impedance % 2.670 3.600
3,091,00 3,393,00 3,561,00 3,542,00 3,994,00 4,606,00	15,455.00 16,965.00 17,805.00 17,710.00 19,970.00	16,652,76 18,279,79 19,184,89 19,082,53 21,517,68	244 220 270	1026 902	4,575.00	6,412.50	10,987.50			1	and the second of the
3,393,00 3,561,00 3,542,00 3,994,00 4,606,00	16,965,00 17,805,00 17,710,00 19,970,00	18,279.79 19,184.89 19,082.53 21,517.68	220 270	902				27,649.26	6-9	49	2 000
3,561.00 3,542.00 3,994.00 4,606.00	17,805.00 17,710.00 19,970.00	19,184.89 19,082.53 21,517.68	270		4 125 00						2.000
3,542.00 3,994.00 4,606.00	17,710.00 19,970.00	19,082,53 21,517,68				5,637,50	9,762.50	28,042.29	9-11	58	2.560
3,994.00 4,606.00	19,970.00	21,517,68	240	845	5,062.50		10,343.75	29,528.64	9-11	50	2.530
4,606.00			1 1 5 5 5	1047	4,500.00	N - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 -	11,043.75	30,126.28	6-8	67	2.200
	23,030.00		269	1006	5,043.75		11,331.25	32,848.93	8	48.1	3.960
1111		24,814.83	170	1197	3,187.50	7,481.25	10,668.75	35,483.58	10	65	2.040
e Phase Pac	đ			<del> </del>	N	umber of units:	1			90	>5.30
	L 2 3 8 2				1. No. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.			12.5			L NEW SA
Unit Price \$	Extended Price \$	Price w/tex \$				Load Loss value	Cost of Losses \$	Life Cycle Cost \$	Delivery (weeks)	Height (inches)	Impedance %
8.675.00	8 675 00	9.347.31	506	5549	3.397.50	8 936 25	10.333.75	19.681.06	9-11	64	5.741
	. Virginia (1994)	5.77 (4.57)							9-11		
8,904.00	8,904.00	4 5 5 5 5 6 6 6 6		5690	5.4			20,186.56	8-10		1 1 1 1 1 1 1
8,595,00	8,595,00	9,261.11	952	5928	3,570.00	7,410.00	10,980,00	20,241.11	8-12	63	5.900
9,536.00	9,536.00	10,275.04	903	5718	3,386.25	7,147.50	10,533,75	20,808.79	6-8	77	5.900
9,194.00	9,194.00	9,906.54	1068	6993	4,005.00	8,741.25	12,746.25	22,652.79	10	57	6.050
10,606.00	10,606.00	11,427.97	818	7059	3,067.50	8,823.75	11,891,25	23,319.22	10	73.5	5.720
•											
	d			<del></del>	N	umber of units:	2		mia pina pina mana mininda	75	>4.00
		Dring	Notone	lond	No Lond	load	Cost of	Life Cycle	Delivery	Moioht	impedance
Price \$	Price \$	w/tax \$				Loss value	Losses \$	Cost \$	(weeks)	(inches)	%
5,436.00	10,872.00	11,714.58	641	3604	4,807.50	9,010.00	13,817.50	25,532.08	6-9	49	
5,640.00	11,280.00	12,154.20	652	3648	4,890.00	9,120.00	14,010.00	26,164.20	9-11	50.5	
6,214.00	12,428.00			2926			The state of the s		9-11		
6,684.00	13,368.00							180	9-11		
								7			
7,231.00 No bid	14,462.00	15,582.81	703	3045	5,272.50	7,612.50	12,885.00	28,467.81	6-8	67	4.50
	Unit Price \$ 8,675.00 8,951.00 8,954.00 9,536.00 9,194.00 10,606.00 No bid Price \$ 5,436.00 5,640.00 6,214.00 6,785.00 6,590.00 7,231.00	Price \$ Price \$  8,675.00	Unit Extended Price Witax\$  8,675.00 8,675.00 9,347.31  8,951.00 8,951.00 9,644.70  8,904.00 8,904.00 9,594.66  8,595.00 8,595.00 9,261.11  9,536.00 9,536.00 10,275.04  9,194.00 9,194.00 9,906.54  10,606.00 10,606.00 11,427.97  No bid Price Witax\$  5,436.00 10,872.00 11,714.58  5,640.00 11,280.00 12,154.20  6,214.00 12,428.00 13,391.77  6,684.00 13,368.00 14,201.48  6,785.00 13,570.00 14,621.68  6,590.00 13,180.00 14,201.45  7,231.00 14,462.00 15,582.81	Unit Extended Price No Load Loss (watts)  8,675,00 8,675,00 9,347,31 906  8,951,00 8,951,00 9,644,76 697  8,904,00 8,904,00 9,594,06 928  8,595,00 8,595,00 9,261,11 952  9,536,00 9,536,00 10,275,04 903  9,194,00 9,194,00 9,906,54 1068  10,606,00 10,606,00 11,427,97 818  No bid  Unit Extended Price No Load Price Price \$ W/tax \$ Loss (watts)  5,436,00 10,872,00 11,714,58 641  5,640,00 11,280,00 12,154,20 652  6,214,00 12,428,00 13,391,17 742  6,684,00 13,368,00 14,404,02 635  6,785,00 13,570,00 14,621,68 784  7,231,00 14,462,00 15,582,81 703	Unit Extended Price No Load Load Price \$ Price \$ w/tax \$ Loss (watts) Loss (watts)  8,675.00 8,675.00 9,347.31 906 5549  8,951.00 8,951.00 9,644.70 697 6001  8,904.00 8,904.00 9,594.06 928 5690  8,595.00 8,595.00 9,261.11 952 5928  9,536.00 9,536.00 10,275.04 903 5718  9,194.00 9,194.00 9,996.54 1068 6993  10,606.00 10,606.00 11,427.97 818 7059  No bid  Unit Extended Price No Load Load Price \$ Price \$ w/tax \$ Loss (watts) Loss (watts)  5,436.00 10,672.00 11,714.58 641 3604  5,640.00 11,280.00 12,154.20 652 3648  6,214.00 12,428.00 13,331.17 742 2926  6,684.00 13,368.00 14,404.02 635 3004  6,785.00 13,570.00 14,621.68 642 2990  6,590.00 13,180.00 14,201.45 784 3103  7,231.00 14,462.00 15,582.81 703 3045	Unit Extended Price No Load Load No Load Price \$ Price \$ w/tax \$ Loss (watts) Loss (watts) Loss value  8,675,00 8,675,00 9,347,31 906 5549 3,397,50  8,951,00 8,951,00 9,644,70 697 6001 2,613,75  8,904,00 8,904,00 9,594,06 928 5690 3,480,00  8,595,00 8,595,00 9,261,11 952 5928 3,570,00  9,536,00 9,536,00 10,275,04 903 5718 3,386,25  9,194,00 9,194,00 9,906,54 1068 6993 4,005,00  10,606,00 10,606,00 11,427,97 818 7059 3,067,50  No bid  Unit Extended Price No Load Load No Load Price \$ Price \$ w/tax \$ Loss (watts) Loss (watts) Loss value  5,436,00 10,872,00 11,714,58 641 3604 4,807,50  5,640,00 11,280,00 12,154,20 652 3648 4,890,00  6,214,00 12,428,00 13,391,17 742 2926 5,565,00  6,785,00 13,368,00 14,404,02 635 3004 4,762,50  6,785,00 13,368,00 14,404,02 635 3004 4,762,50  6,590,00 13,180,00 14,201,45 784 3103 5,880,00  7,231,00 14,462,00 15,582,81 703 3045 5,272,50	Unit Extended Price No Load Load No Load Load Price \$ Price \$ w/tax \$ Loss (watts) Loss (watts) Loss value Reference R	Unit Extended Price No Load Load No Load Load Cost of Price \$ Price \$ w/tax \$ Loss (watts) Loss (watts) Loss value Loss value Loss value Losses \$ 8,675,00 8,675,00 9,347,31 906 5549 3,397,50 8,936,25 10,333,75 8,951,00 8,951,00 9,644,70 697 6001 2,613,75 7,501,25 10,115,00 8,904,00 8,904,00 9,594,06 928 5690 3,480,00 7,112,50 10,592,50 8,595,00 8,595,00 9,261,11 952 5928 3,570,00 7,410,00 10,980,00 9,536,00 9,356,00 10,275,04 903 5718 3,386,25 7,147,50 10,533,75 9,194,00 9,194,00 9,906,54 1068 6993 4,005,00 8,741,25 12,746,25 10,606,00 10,606,00 11,427,97 818 7059 3,067,50 8,823,75 11,891,25 No bid  Price \$ Price \$ W/tax \$ Loss (watts) Loss (watts) Loss value Loss value Loss value Loss value Losses \$ 5,436,00 10,872,00 11,714,58 641 3604 4,807,50 9,010,00 13,817,50 5,640,00 11,280,00 12,154,20 652 3648 4,890,00 9,120,00 14,010,00 6,214,00 12,428,00 13,391,17 742 2926 5,565,00 7,315,00 12,880,00 6,844,00 13,368,00 14,404,02 635 3004 4,762,50 7,510,00 12,272,50 6,785,00 13,570,00 14,621,68 642 2990 4,815,00 7,757,50 13,637,50 7,231,00 14,462,00 15,582,81 703 3045 5,272,50 7,612,50 12,885,00 7,231,00 14,462,00 15,582,81 703 3045 5,272,50 7,612,50 12,885,00 7,231,00 14,462,00 15,582,81 703 3045 5,272,50 7,612,50 12,885,00	Unit Extended Price   No Load Load No Load Load Cost of Life Cycle Price   Price   Witax   Loss (watts) Loss (watts) Loss value Loss value Losses   Cost   1,681.06   8,951.00   8,951.00   9,544.78   697   6001   2,613.75   7,501.25   10,115.00   19,759.70   8,904.00   8,904.00   9,594.06   928   5690   3,480.00   7,112.50   10,592.50   20,186.56   8,595.00   8,595.00   9,261.11   952   5928   3,570.00   7,410.00   10,980.00   20,241.11   9,536.00   9,356.00   10,275.04   903   5718   3,386.25   7,147.50   10,533.75   20,808.79   9,194.00   9,194.00   9,906.54   1068   6993   4,005.00   8,741.25   12,746.25   22,652.79   10,606.00   10,606.00   11,427.97   818   7059   3,067.50   8,823.75   11,891.25   23,319.22   No bid   No Load Loss (watts) Loss (watts) Loss value Loss value Losses   Cost   5,436.00   10,872.00   11,714.58   641   3604   4,807.50   9,010.00   13,817.50   25,532.08   5,640.00   11,280.00   12,154.20   652   3648   4,990.00   9,120.00   14,010.00   26,164.20   6,214.00   12,428.00   13,391.17   742   2926   5,565.00   7,315.00   12,880.00   26,271.17   6,884.00   13,368.00   14,404.02   635   3004   4,762.50   7,510.00   12,272.50   26,676.52   6,785.00   13,570.00   14,621.68   642   2990   4,815.00   7,757.50   13,637.50   27,838.95   7,231.00   14,462.00   15,582.81   703   3045   5,272.50   7,612.50   12,885.00   28,467.81	Unit Extended Price No Load Load No Load Load Cost of Life Cycle Delivery Price \$ Price \$ w/tax \$ Loss (watts) Loss (watts) Loss (watts) Loss value Loss value Loss value Losses \$ Cost \$ (weeks)	Unit   Extended   Price   No Load   Load   No Load   Load   Load   Cost of   Life Cycle   Delivery   Height

2

Polemoi	ınt
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Tax (factor): 1.0775
No Load Loss \$/watt: 3.75
Load Loss \$/watt: 1.25

December 3, 2003

				Loss en Ford.	,,20					4.1 %		<u> </u>
Bid Item 1: 37.5 kVA, 120/240 Volt, Sir	ngle Phase CP	Pole				Nu	imber of units:	8		* *·.	48	625
Vendor	Unit Price \$	Extended Price \$	Price w/tax \$	No Load Loss (watts)	Load Loss (watts)	No Load Loss value	Load Loss value	Cost of Losses \$	Life Cycle Cost \$	Delivery (weeks)	Height (inches)	Weight (pounds)
Wesco Distribution	CO4 70	2 524 00	3.840.21	71	407	1,597.50	2 502 50	E 400 00	0.040.04	4.0	477	40
Central Moloney	594.00 724.00	3,564.00 4,344.00	4,680.66	92	467 354	2,070.00	3,502.50 2,655.00	5,100.00 4,725.00	8,940.21 9,405.66	4-6: 10	4 <u>2</u> 39	49 51
Western States Electric (Cooper)	844,00	5.064.00	5,456,46	75	350	1,687.50	2,625.00	4,312,50	9,768.96	9-11	41	53
ERMCO	830,00	4,980.00	5,365,95	75	366	1.687.50	2,745.00	4,432.50	9,798.45	8-11	34.9	- 51
Howard Industries	832.00	4,992.00	5,378.88	.86	352	1,935.00	2,640.00	4,575.00	9,953.88	8-10	36	49
Kuhiman Electric	837.00	5,022.00	5,411.21	77	436	1,732.50	3,270.00	5,002.50	10,413.71	8-10		55
G E Supply	985.00	5,910.00	6,368.03	70	368	1,732.00	2,760.00	4,335.00	10,703.03	10		55 62
G E Supply	303.00	5,810.00	0,000.03	10	300	1,313.00	2,760.00	4,555.00	10,103.03	10	28,3	0.0
			·	Tour								
Bid Item 2: 50 kVA, 120/240 Volt, Sin	gle Phase CP P	ole				N	umber of units:	10			51	80
"萨尔"名《萨马》 医连二	177			** . *	44					505		
		- 4	and the	No Load	Load				t te mf	***		n Ballanda in na
Vendor	Unit	Extended	Price	Loss	Loss	No Load	Load	Cost of	Life Cycle	Delivery	Height	Weight
	Price \$	Price \$	w/tax \$	(watts)	(watts)	Loss value	Loss value	Losses \$	Cost \$	(weeks)	(inches)	(pounds)
Wesco Distribution	728.00	18,200.00	19,610.50	94	457	8,812.50	14,281.25	23,093.75	42,704,25	4-6	.39	67
Central Moloney	801.00	20.025.00	21,576.94	99	507	9,281.25	15,843,75		46,701.94	10		62
Howard Industries	918,00	22,950.00	24,728.63	117	438	50.00	13,687.50		49,384.88	8-10		62
ERMCO	1.000.00	25,000.00	26.937.50	93	453	the state of the s		22,875.00	49,812.50	8-11		60
	984.00	24,600.00	26,506.50	87	495			23,625.00	50,131.50	9-11		-6(
Western States Electric (Cooper)	916.00		24,674,75					25,968.75	50,643.50	8-10		6
Kuhlman Electric		22,900,00 29,950.00	32,271.13	111 103	498 376	9,656.25		21,406.25	53,677.38	10	4.1	8
G E Supply	1,198.00	29,950.00	.3£,£1 1.13	103	210	9,000,20	11,130.00	21,400.25	93,011.30	,,,,	33.1	02
Bid Item 3: 37.5 kVA, 277 Volt, Single	e Phase Conv.	Pole		tanoomina ta	**************************************	N	umber of units:	7			48	62
				No Load	Load							
Vendor	Unit	Extended	Price	Loss	Loss	No Load	Load	Cost of	Life Cycle	Delivery	Height	Weight
vencor	Price \$	Price \$	w/tax \$	(watts)	(watts)	Loss value	Loss value	Losses \$	Cost \$	(weeks)	(inches)	(pounds
	FING \$	L.HOG 4	Military de	(watta)	(ALCUTO)	Cass value	FD20 total	COGGGG G	Over	(10000)	(urstea)	Provide
Wesco Distribution	615.00	4.920.00	5,301.30	- 82	327	2,460.00	3,270.00	5,730,00	11,031,30	4-6	36	48
Central Moloney	655.00	5,240.00	5,646,10	88	302		3,020.00	5,660.00	11,306,10	10		51
Western States Electric (Cooper)	703.00	5,624.00	6,059.86	75	319				11,499.86			5
	636.00	5,088.00	5,482.32	68	420				11,722.32			-,
G E Supply	700.00	5,600.00	6,034.00	91	313			* *	11,894.00			
Howard Industries		1 1 1 1	6,775.32	82	324		3,240.00	5 (0.0	12,475.32	9-12		
ERMCO	786.00	6,288.00		62 96			,		12,475.32			
Kuhlman Electric	795.00	6,360.00	6,852.90	90	342	2,880.00	3,420.00	0,000,00	13,132.90	0-10	32	4